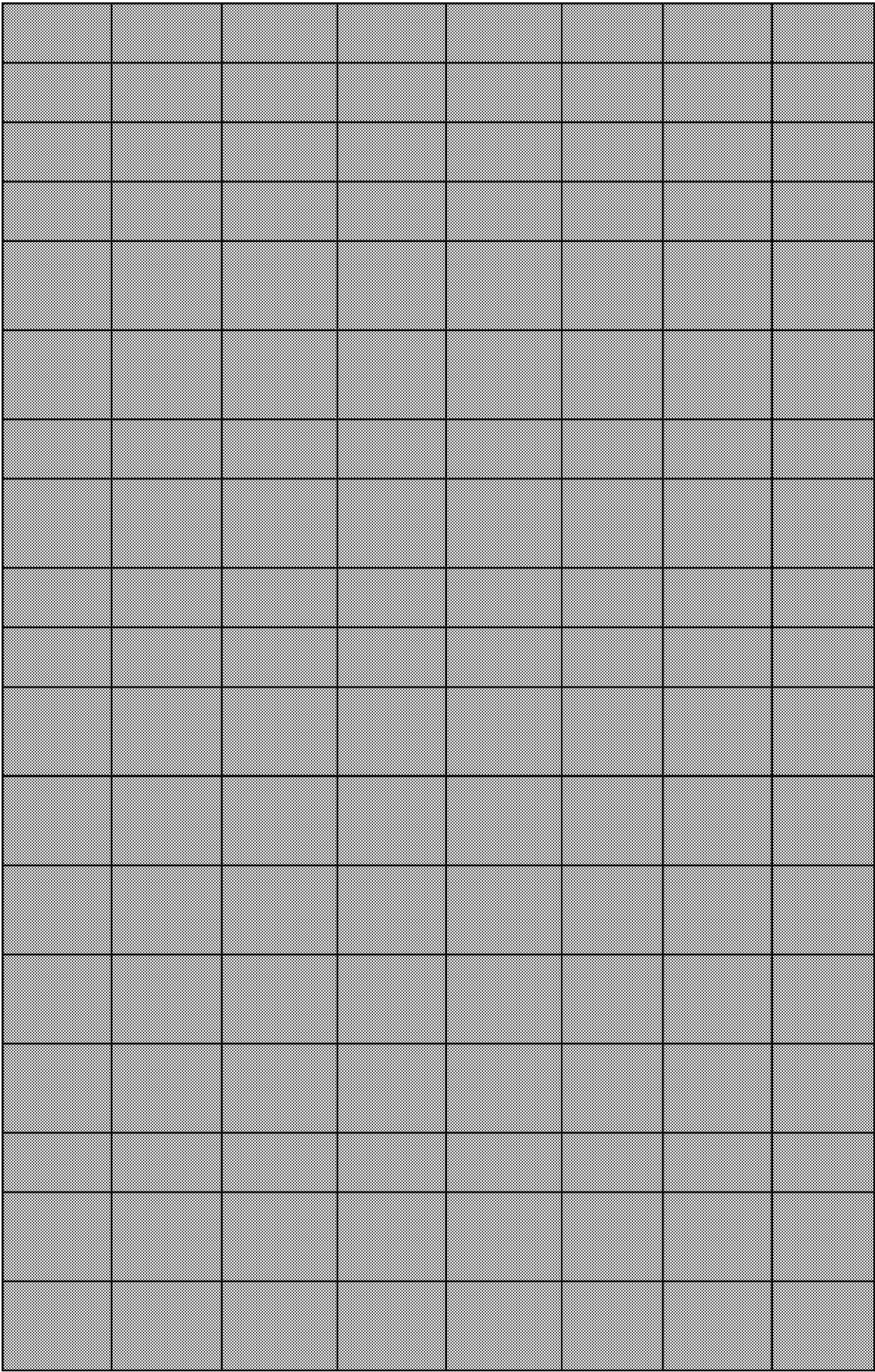


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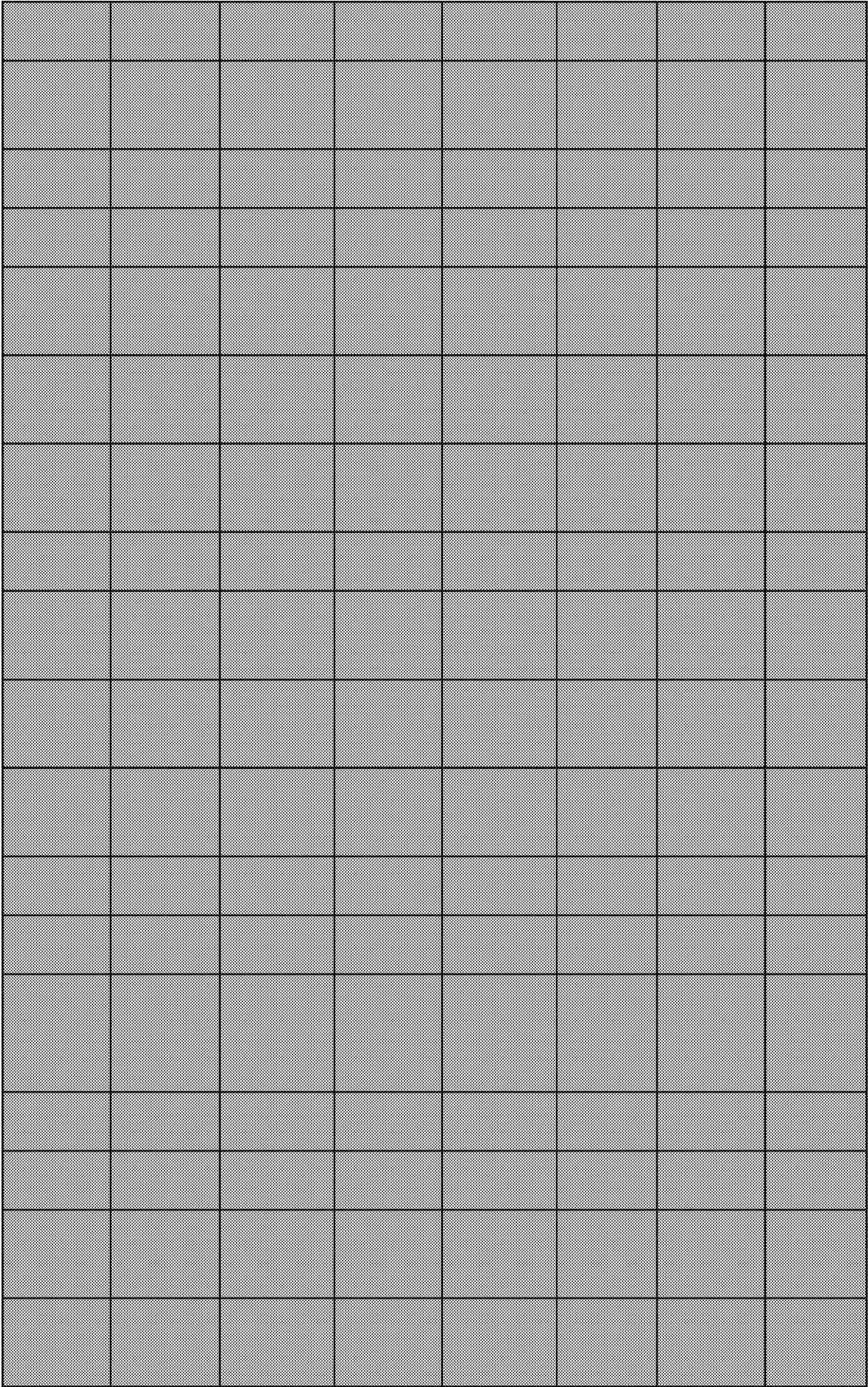
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P. R. Gardner, I. Fridovich. Superoxide sensitivity of the Escherichia coli aconitase. J Biol Chem. 1991. 266:19328-33
M. A. Wallace, L. L. Liou, J. Martins, M. H. Clement, S. Bailey, V. D. Longo, J. S. Valentine, E. B. Gralla. Superoxide inhibits 4Fe-4S cluster enzymes involved in amino acid biosynthesis. Cross-compartment protection by CuZn-superoxide dismutase. J Biol Chem. 2004. 279:32055-62
M. D. Scott, S. R. Meshnick, J. W. Eaton. Superoxide dismutase-rich bacteria. Paradoxical increase in oxidant toxicity. J Biol Chem. 1987. 262:3640-5
B. P. James, W. D. Staatz, S. T. Wilkinson, E. Meuillet, G. Powis. Superoxide dismutase is regulated by LAMMER kinase in Drosophila and human cells. Free Radic Biol Med. 2009. 46:821-7
P. Diaz-Rosales, M. Chabrillon, S. Arijo, E. Martinez-Manzanares, M. A. Morinigo, M. C. Balebona. Superoxide dismutase and catalase activities in Photobacterium damsela ssp. piscicida. J Fish Dis. 2006. 29:355-64
K. Morishita, H. Takeuchi, N. Morimoto, T. Shimamura, Y. Kadota, M. Tsuda, T. Taniguchi, H. Ueda, T. Yamamoto, T. Sugiura. Superoxide dismutase activity of Helicobacter pylori per se from 158 clinical isolates and the characteristics. Microbiol Immunol. 2012. 56:262-72
H. Tabunoki, M. J. Gorman, N. T. Dittmer, M. R. Kanost. Superoxide dismutase 2 knockdown leads to defects in locomotor activity, sensitivity to paraquat, and increased cuticle pigmentation in Tribolium castaneum. Sci Rep. 2016. 6:29583
K. Barabas, L. Szabo, S. I. Varga, G. Berencsi, A. Bartkowiak, B. Matkovics. Study of the effects of paraquat on the peroxide metabolism enzymes in guinea-pig. Gen Pharmacol. 1982. 13:133-7
M. A. Trush, E. G. Mimnaugh, E. Ginsburg, T. E. Gram. Studies on the in vitro interaction of mitomycin C, nitrofurantoin and paraquat with pulmonary microsomes. Stimulation of reactive oxygen-dependent lipid peroxidation. Biochem Pharmacol. 1982. 31:805-14
K. Tanaka, M. Aono, H. Saji, A. Kubo. Stress tolerance of transgenic Nicotiana tabacum with enhanced activities of glutathione reductase and superoxide dismutase. Biochem Soc Trans. 1996. 24:200s
J. B. Harley, C. J. Fetterolf, C. A. Bello, J. G. Flaks. Streptonigrin toxicity in Escherichia coli: oxygen dependence and the role of the intracellular oxidation--reduction state. Can J Microbiol. 1982. 28:545-52
I. K. Smith. Stimulation of glutathione synthesis in photorespiring plants by catalase inhibitors. Plant Physiol. 1985. 79:1044-7
C. Garcia-Alfonso, J. Lopez-Barea, P. Sanz, G. Repetto, M. Repetto. Stimulation of antioxidative enzymes by paraquat in cultured Vero cells. Vet Hum Toxicol. 1995. 37:414-21
J. Wenk, P. Brenneisen, M. Wlaschek, A. Poswig, K. Briviba, T. D. Oberley, K. Scharffetter-Kochanek. Stable overexpression of manganese superoxide dismutase in mitochondria identifies hydrogen peroxide as a major oxidant in the AP-1-mediated induction of matrix-degrading metalloprotease-1. J Biol Chem. 1999. 274:25869-76
K. M. Faulkner, S. I. Liochev, I. Fridovich. Stable Mn(III) porphyrins mimic superoxide dismutase in vitro and substitute for it in vivo. J Biol Chem. 1994. 269:23471-6
Y. S. Chun, E. J. Yeo, H. J. Suh, J. W. Park. Spontaneous generation of reactive oxygen species in the mixture of cyanide and glycerol. Ann N Y Acad Sci. 2004. 1030:43-51
R. Morandini, J. M. Boeynaems, X. Duhant, F. Jacquemotte, E. Kinnaert, G. Ghanem. SODs are involved in the regulation of ICAM-1 expression in human melanoma and endothelial cells. Cell Mol Biol (Noisy-le-grand). 1999. 45:1053-63
C. Laureau, R. Bligny, P. Streb. The significance of glutathione for photoprotection at contrasting temperatures in the alpine plant species Soldanella alpina and Ranunculus glacialis. Physiol Plant. 2011. 143:246-60

Mutants of <i>Escherichia coli</i> lacking superoxide dismutase (SOD) activity were used to explore the sensitivity of aconitase
Among the phenotypes of <i>Saccharomyces cerevisiae</i> mutants lacking CuZn-superoxide dismutase (Sod1p) is an aerobic ly
Superoxide dismutase is considered important in protection of aerobes against oxidant damage, and increased tolerance
LAMMER kinases (also known as CDC-2-like or CLKs) are a family of dual specificity serine/threonine protein kinases that
The ability of a set of <i>Photobacterium damsela</i> ssp. <i>piscicida</i> strains isolated from different fish species to produce diffe
We investigated the correlation between the SOD activity of <i>Helicobacter pylori</i> ( <i>H. pylori</i> ) and gastroduodenal diseases
Insects can rapidly adapt to environmental changes through physiological responses. The red flour beetle <i>Tribolium casta</i>
1. Guinea-pigs, which exhibit a similar metabolism to that of man insofar as they are incapable of synthesizing ascorbic a
In vitro experiments were performed to evaluate the capacity of the redox cycling compounds mitomycin C (MC), nitrofu
The bacterial physiology of streptonigrin toxicity was further investigated. An optimal oxygen concentration for toxicity v
The effect of various herbicides on glutathione levels in barley ( <i>Hordeum vulgare</i> L.), tobacco ( <i>Nicotiana tabacum</i> L.), soy
Different cellular and biochemical cytotoxicity indicators have been assessed to evaluate the damages caused in Vero mo
Reactive oxygen species (ROS) are important second messengers for the induction of several genes in a variety of physiol
Several manganic porphyrins, with substituents on the methine bridge carbons, were prepared and examined for stabilit
Reactive oxygen species are involved in tumor promotion or apoptosis. In assaying prooxidant or antioxidant activities, c
It is well known that ICAM-1 expression can be stimulated by TNF and by oxidative stress, via the activation of specific tra
The significance of total glutathione content was investigated in two alpine plant species with highly differing antioxidati

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P. Zimmermann, C. Heinlein, G. Orendi, U. Zentgraf. Senescence-specific regulation of catalases in <i>Arabidopsis thaliana</i> (L.) Heynh. <i>Plant Cell Environ.</i> 2006. 29:1049-60
L. J. Yant, Q. Ran, L. Rao, H. Van Remmen, T. Shibata, J. G. Belter, L. Motta, A. Richardson, T. A. Prolla. The selenoprotein GPX4 is essential for mouse development and protects from radiation and oxidative damage insults. <i>Free Radic Biol Med.</i> 2003. 34:496-502
S. D. Mercurio, G. F. Combs. Selenium-dependent glutathione peroxidase inhibitors increase toxicity of prooxidant compounds in chicks. <i>J Nutr.</i> 1986. 116:1726-34
V. Mittova, M. Tal, M. Volokita, M. Guy. Salt stress induces up-regulation of an efficient chloroplast antioxidant system in the salt-tolerant wild tomato species <i>Lycopersicon pennellii</i> but not in the cultivated species. <i>Physiol Plant.</i> 2002. 115:393-400
Y. Gueta-Dahan, Z. Yaniv, B. A. Zilinskas, G. Ben-Hayyim. Salt and oxidative stress: similar and specific responses and their relation to salt tolerance in citrus. <i>Planta.</i> 1997. 203:460-9
K. Kiyomiya, N. Matsushita, S. Matsuo, M. Kurebe. Roles of oxygen radical production and lipid peroxidation in the cytotoxicity of cephaloridine on cultured renal epithelial cells (LLC-PK1). <i>J Vet Med Sci.</i> 2000. 62:977-81
M. S. Sandy, P. Moldeus, D. Ross, M. T. Smith. Role of redox cycling and lipid peroxidation in bipyridyl herbicide cytotoxicity. Studies with a compromised isolated hepatocyte model system. <i>Biochem Pharmacol.</i> 1986. 35:3095-101
Y. Suzuki, Y. Kondo, S. Himeno, K. Nemoto, M. Akimoto, N. Imura. Role of antioxidant systems in human androgen-independent prostate cancer cells. <i>Prostate.</i> 2000. 43:144-9
R. Abrashev, P. Dolashka, R. Christova, L. Stefanova, M. Angelova. Role of antioxidant enzymes in survival of conidiospores of <i>Aspergillus niger</i> 26 under conditions of temperature stress. <i>J Appl Microbiol.</i> 2005. 99:902-9
D. J. Lightfoot, G. R. McGrann, A. J. Able. The role of a cytosolic superoxide dismutase in barley-pathogen interactions. <i>Mol Plant Pathol.</i> 2016. #volume#:#pages#
I. Cummins, D. J. Cole, R. Edwards. A role for glutathione transferases functioning as glutathione peroxidases in resistance to multiple herbicides in black-grass. <i>Plant J.</i> 1999. 18:285-92
R. J. Reiter, D. Melchiorri, E. Sewerynek, B. Poeggeler, L. Barlow-Walden, J. Chuang, G. G. Ortiz, D. Acuna-Castroviejo. A review of the evidence supporting melatonin's role as an antioxidant. <i>J Pineal Res.</i> 1995. 18:1-11
J. L. Donahue, C. M. Okpodu, C. L. Cramer, E. A. Grabau, R. G. Alscher. Responses of Antioxidants to Paraquat in Pea Leaves (Relationships to Resistance). <i>Plant Physiol.</i> 1997. 113:249-257
T. T. Todorova, V. Y. Petrova, S. Vuilleumier, A. V. Kujumdzieva. Response to different oxidants of <i>Saccharomyces cerevisiae</i> ure2Delta mutant. <i>Arch Microbiol.</i> 2009. 191:837-45
E. Weidauer, T. Lehmann, A. Ramisch, E. Rohrdanz, H. Foth. Response of rat alveolar type II cells and human lung tumor cells towards oxidative stress induced by hydrogen peroxide and paraquat. <i>Toxicol Lett.</i> 2004. 151:69-78
X. S. Song, W. H. Hu, W. H. Mao, J. O. Ogwen, Y. H. Zhou, J. Q. Yu. Response of ascorbate peroxidase isoenzymes and ascorbate regeneration system to abiotic stresses in <i>Cucumis sativus</i> L. <i>Plant Physiol Biochem.</i> 2005. 43:1082-8
J. Lee, K. T. Hwang, M. S. Heo, J. H. Lee, K. Y. Park. Resistance of <i>Lactobacillus plantarum</i> KCTC 3099 from Kimchi to oxidative stress. <i>J Med Food.</i> 2005. 8:299-304
T. T. Huang, E. J. Carlson, S. A. Leadon, C. J. Epstein. Relationship of resistance to oxygen free radicals to CuZn-superoxide dismutase activity in transgenic, transfected, and trisomic cells. <i>Faseb j.</i> 1992. 6:903-10

Oxygen free radicals are thought to play an essential role in senescence, especially those derived from peroxisomes. The
Lipid peroxidation has been implicated in a variety of pathophysiological processes, including inflammation, atherogenesis
The acute lethality of paraquat (1, 1'-dimethyl-4,4'-bipyridinium dichloride; also methyl viologen) for chicks was reduced
The response of the chloroplastic antioxidant system of the cultivated tomato <i>Lycopersicon esculentum</i> (Lem) and its wild
Salt damage to plants has been attributed to a combination of several factors including mainly osmotic stress and the accumulation
To clarify the mechanism of cephalosporin nephrotoxicity, the cytotoxic effects of cephaloridine (CER), a nephrotoxic cephalosporin,
The role of active oxygen species and lipid peroxidation in the toxic effects of diquat, paraquat and other bipyridyl herbicides
BACKGROUND: Most prostate cancer cells respond to initial hormonal therapy; however, some of them eventually acquire resistance
AIMS: A better understanding of the role of antioxidant enzymes, superoxide dismutase (SOD) and catalase (CAT) in the pathogenesis
Reactive oxygen species (ROS), including superoxide ( $O_2^{\cdot-}$ / $HO_2^{\cdot}$ ) and hydrogen peroxide ( $H_2O_2$ ), are differentially produced
Black-grass ( <i>Alopecurus myosuroides</i> ) is a major weed of wheat in Europe, with several populations having acquired resistance
This survey summarizes the findings, accumulated within the last 2 years, concerning melatonin's role in defending against
Differential sensitivity to the oxidant paraquat was observed in pea ( <i>Pisum sativum</i> L.) based on cultivar and leaf age. To
Growth of <i>Saccharomyces cerevisiae</i> ure2Delta mutant strain was investigated in the presence of diverse oxidant compounds
The expression of MDR1b coding mRNA is increased in alveolar type II cells from juvenile rat lung in culture. Hydrogen peroxide
Ascorbate peroxidase (APX) isoenzymes, distributed in at least four distinct cell compartments, the chloroplastic stroma
The antioxidative capacity of two lactic acid bacteria isolated from Kimchi, a Korean fermented food, was evaluated by measuring
Although CuZn-superoxide dismutase (CuZnSOD) has been shown to reduce oxidative damage in several systems, the question

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